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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/726,970

12/03/2003

Craig B. Simpson

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01/11/2008

METCALF INTELLECTUAL PROPERTY LAW, LLC
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EXAMINER

LEE, EDMUND H

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

01/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

✓ The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/726,970

Applicant(s)

SIMPSON ET AL

Examiner

EDMUND H. LEE

Art Unit

1791

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 16 is/are allowed.
- 6) ☒ Claim(s) 1 and 5-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/24/07 has been entered.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 15 and 16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 22 of U.S. Patent No. 7204951.

Although the conflicting claims are not identical, they are not patentably distinct from

each other because teachings of claim 22 encompasses the claimed limitations of instant claims 15 and 16.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 5-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0572248 over Younie et al (USPN 6217000). EP 0572248 teaches the basic claimed process including a conventional process for forming a single piece co-cured composite wing structure having a flying surface and at least one structural member (col 1, In 48-col 2, In 28; figs 1-2); situating a first flying surface composite material in alignment with a controlling surface of a first clamshell frame (col 1, In 48-col 2, In 28; figs 1-2); aligning a plurality of forms to the first clamshell frame, wherein a composite material is position between selective forms, wherein the composite material is positioned between selective forms creates a spar, wherein the selective forms each include a core (support 16), and wherein the forms are pressurizable (col 1, In 48-col 2, In 28; figs 1-2); situating a second flying surface composite material between the plurality of forms and a controlling surface of a second clamshell frame (col 1, In 48-col 2, In 28; figs 1-2); closing the first and second clamshell frames together (col 1, In 48-col 2, In 28; figs 1-2); and curing the composite material (col 1, In 48-col 2, In 28; figs 1-2). EP 0572248, however, does not teach the design of the spar. Younie et al teach a

method of making a wing box, wherein a mold tool is used to compress a spar comprising two substantially C-shaped composite sections positioned in opposing orientations to form an I beam (col 13, lns 1-24; fig 14). EP 0572248 and Younie et al are combinable because they are analogous with respect to molding a spar of a wing box. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the spar of Younie et al for the spar of EP 0572248 in order to form a durable wing box. In regards to claims 10, 11, and 13, such are taught by EP 0572248 (col 1, ln 48-col 2, ln 28; figs 1-2). In regard to claim 5, the specific design of the spar is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed spar designs are well-known in the wing/airfoil art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the claimed spar designed in the process of EP 0572248 (modified) in order to form a wing structure having diverse designs. In regard to claims 6-9, the use of a specific molding tool is a mere obvious matter of choice dependent on equipment availability and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed molding tools are well-known in the wing/airfoil art. Thus, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to use the claimed molding tools in the process of EP 0572248 in order to form the wing structure of EP 0572248 with efficiency and accuracy. It should be noted that the forms of EP 0572248 teach pressurizable forms

capable of receiving a positive pressure during the curing process, and controlling the shape of the composite with the shape of the form. In regard to claim 12, the use of a specific molding material is a mere obvious matter of choice dependent on the desired final product and material availability and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is well-known in the wing/airfoil art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply primer to the controlling surface of the frames in order to ensure proper positioning and bonding of the materials.

6. Claims 15-16 are allowed.

7. Applicant's arguments with respect to claims 1 and 5-16 have been considered but are moot in view of the new ground(s) of rejection.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571.272.1176. The fax phone

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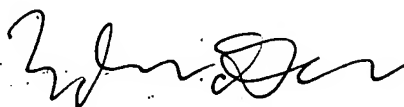
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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EDMUND H. LEE
Primary Examiner
Art Unit 1791

EHL


1/6/08